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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,963	06/29/2001	Young Tae Yang	8733.441.00	6103
30827	7590	11/30/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP			NORRIS, JEREMY C	
1900 K STREET, NW			ART UNIT	
WASHINGTON, DC 20006			PAPER NUMBER	
			2841	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

K.S.

Office Action Summary	Application No. 09/893,963	Applicant(s) YANG ET AL.	
	Examiner Jeremy C. Norris	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 8-21 is/are rejected.
- 7) ☒ Claim(s) 3 and 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

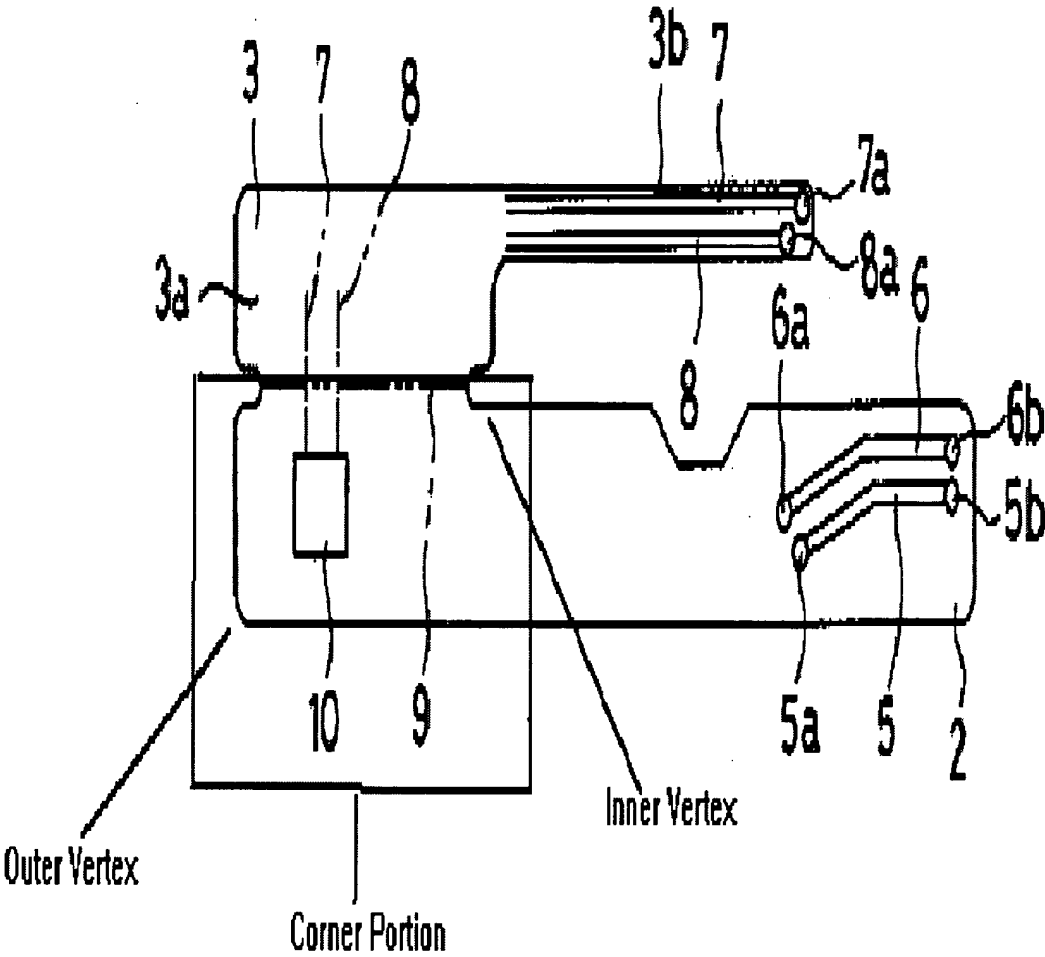
Claims 1, 2, 4, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,748,293 (hereafter Kikuchi).

Kikuchi discloses, referring to figures 2a-c, a flexible circuit film, comprising: a body (11); a first pad (2) provided at one end of the body to be adhesively connected to a pad of a first printed circuit board a second pad provided at other end of the body to be engaged to a connector of a second printed circuit board and least one recess (10) defined in the body [claim 1] wherein the recess is defined in the body in a region adjacent to second pad [claim 2], wherein the body has at least one bent portion (portion near reference character 8 in figure 2a) [claim 4], wherein said at least one recess has a substantially concave shape [claim 8] wherein the at least one recess has a substantially curved shape [claim 9].

Claims 10-21 rejected under 35 U.S.C. 102(b) as being anticipated by US 5,917,158 (hereafter Takao).

Note, a marked up copy of figure 1 of Takao is provided below to assist in explanation.

Fig. 1



Takao discloses, referring to figures 1 & 2, a flexible printed circuit film comprising, a body having a first portion (2) and a second portion (3) the first portion intersecting the second portion to form a corner portion (the boxed portion outlined above), the corner portion having an inner vertex and an outer vertex (as noted in the marked-up figure above); a first pad (6b) connected at an end of the first portion; a second pad (7a) connected at an end of the second portion; and a recess (near reference character 9, under reference character 3a, or under reference 8) in the body [claim 10], wherein the first recess has a substantially concave shape [claim 11], wherein the first recess has a substantially curved shape [claim 12], wherein the first portion is substantially perpendicular to the second portion [claim 13], wherein the first recess is at the inner vertex of the corner portion [claim 14], further comprising a second recess (under reference character 3a) in a region of the second portion of the body, the region being between the outer vertex of the corner portion and the second pad [claim 15], wherein the second recess has a substantially concave shape [claim 16], wherein the second recess has a substantially curved shape [claim 17], wherein the first recess (under reference character 8) is at a region between the inner vertex and the second pad [claim 18], further comprising a second recess (under reference character 3a) in a region between the outer vertex of the corner portion and the second pad [claim 19], wherein the second recess has a substantially concave shape [claim 20], wherein the second recess has a substantially curved shape [claim 21].

Response to Arguments

Applicant's arguments regarding claims 1, 2, 4, 8, and 9-21, filed 02 September 2004, have been fully considered but they are not persuasive.

Regarding claims 1, 2, 4, 8, and 9, Applicants allege Kikuchi does not teach or suggest "a body ... and at least one recess defined in the body". However, as clearly demonstrated in figure 2c of Kikuchi the hole 10 is indeed a recess defined in the body 5. Any other interpretation of the device is simply untenable. Applicants further allege "the locking hole 10 cited by the Examiner is for receiving a screw and does not function as a recess in the body of a flexible printed circuit film". However, the Examiner notes that Applicants have claimed no particular function for the recess, nor have Applicants given the word "recess" any special technical definition. In the absence of these special definitions, the Examiner is forced to give the term "recess" its plain meaning which would indeed include a hole, irrespective of the function of the hole. Therefore, the traversal on these grounds is deemed unsuccessful.

Regarding claims 10-21, Applicants allege that Takao does not teach or suggest "a body having a first portion and a second portion, the first portion intersecting the second portion to form a corner portion, the corner portion having an inner vertex and an outer vertex." However, as demonstrated by illustration above, Takao does indeed show these claimed features. Applicants additionally allege, The Office Action attempts to cite a "U" shaped cut-out as being a "corner," as recited by claim 10. Calling a "U" cut out a "corner" is completely contrary to the use of the word "corner" in the present specification and the word's ordinary meaning. This allegation could only stem from a

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misinterpretation by Applicants of the previous Office Action. The Examiner did not refer to a U shaped cutout anywhere in the preceding Office Action but rather refer to the area near said cutout. By virtue of the illustration provided above any such misinterpretation should now be alleviated. Further Applicants allege, "the Office Action neglects to address the recited "inner vertex" and "outer vertex." The previous Office Action did not fail to address these limitations, rather the previous Office Action relied on the assumption that Applicants were well versed in the art and thus could interpret the drawings of Takao without every such limitation being specifically point out in the figure, though clearly evident. However, Examiner has provided the above illustration to mitigate any confusions Applicants may have had. Moreover, the Examiner notes that Applicants have included a drawing similar to figure 1 in Takao (figure 3 of the instant application) where the corner portion, inner vertex, and outer vertex are un-labeled, yet readily apparent to one of ordinary skill in the art. Accordingly, the traversal on these grounds is deemed unsuccessful.

Allowable Subject Matter

Claims 3 and 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 3 states the limitation "wherein the recess is defined in at least two side surfaces of the body in the region adjacent to the second pad". This limitation, in conjunction with the other claimed limitations was neither found to be disclosed in, nor

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suggested by the prior art. Claim 5 states the limitation "wherein the at least one recess is defined at each of the at least two side surfaces in a region adjacent to the bent portion. This limitation, in conjunction with the other claimed limitations was neither found to be disclosed in, nor suggested by the prior art. Claim 6 states the limitation "wherein a first recess is defined at the bent portion and said at least one recess is defined in the body in a region adjacent to the second pad". This limitation, in conjunction with the other claimed limitations was neither found to be disclosed in, nor suggested by the prior art. Claim 7 states the limitation "wherein said at least one recess is defined at the bent portion". This limitation, in conjunction with the other claimed limitations was neither found to be disclosed in, nor suggested by the prior art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

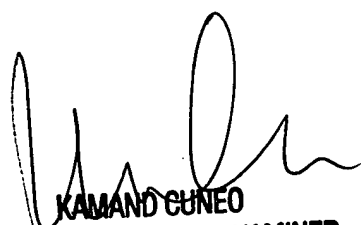
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCSN


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